## WHAT IS CLAIMED IS:

1. A method of inducing weight loss in a patient, comprising administering by continuous infusion an effective amount of an MC4R agonist peptide to a patient in need thereof, wherein the MC4R agonist peptide is selected from the group consisting of:

Ac-Cya-Arg-cyclo[Cys-Ala-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Ala-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Arg-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Asn-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-cyclo[Cys-Asp-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Asp-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-cyclo[Cys-Gln-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Gln-His-D-Phe-Arg-Trp-Cys]-OH, Ac-Tyr-Arg-cyclo[Cys-Gln-His-D-Phe-Arg-Trp-Cys]-OMe, Tyr-Arg-cyclo[Cys-Gly-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Gly-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-His-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Ile-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-cyclo[Cys-Leu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-cyclo[Cys-Lys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, N-methyl-Tyr-Arg-cyclo[Cys-Met-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Met-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Phe-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Pro-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Ser-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Thr-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Trp-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Tyr-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Val-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Arg-cyclo[Cys-Cya-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-D-Arg-cyclo[Cys-Cya-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Cya-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-cyclo[Cys-Glu-His-(4-F-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-cyclo[Cys-Glu-His-(4-Cl-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-cyclo[Cys-Glu-His-(4-Br-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-cyclo[Cys-Glu-(1-Me-His)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-Lys-Pro-NH<sub>2</sub>, Ac-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-Ser-Pro-NH<sub>2</sub>, N-propionyl-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, N-butyryl-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, N-valeryl-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, 3-guanidinopropionyl-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, 4-guanidinobutyryl-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, 5-guanidinovaleryl-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-diaminopropionyl-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-diaminobutyryl-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-OH, D-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-D-Arg-cyclo[Cys-Glu-His-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-OH, Ac-Arg-cyclo[Cys-Glu-His-(4-Cl-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Arg-cyclo[Cys-Glu-(1-Me-His)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-D-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-D-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-OH, Ac-hArg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Cit-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Cit-cyclo[Cys-Glu-(1-Me-His)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Leu-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Lys-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Lys(ipr)-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-nLeu-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-nLeu-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-Ser-Pro-NH<sub>2</sub>,

Ac-Orn-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-Val-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

N-(2-naphthalenesulfonyl)-D-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

N-(2-naphthalenesulfonylamino-4-oxo-butyryl)-D-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

3-(4-hydroxyphenyl)propionyl-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

3-(4-methylbenzoyl)propionyl-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-OH,

Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH-(CH<sub>2</sub>)<sub>6</sub>-NH<sub>2</sub>,

Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-Glu-NH<sub>2</sub>,

Ac-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-OH,

N-succinyl-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

N-glutaryl-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

N-glutaryl-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-OH,

gluconoyl-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys] alcohol,

Ac-Tyr-D-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-Tyr-Arg-cyclo[D-Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-Tyr-Arg-cyclo[Cys-Glu-(1-Me-His)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-Tyr-Arg-cyclo[Cys-Glu-(1-Me-D-His)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-Tyr-Arg-cyclo[Cys-Glu-His-(4-F-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-Tyr-Arg-cyclo[Cys-Glu-(1-Me-His)-(4-F-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-Tyr-Arg-cyclo[Cys-Glu-(1-Me-D-His)-(4-F-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-Tyr-Arg-cyclo[Cys-Glu-His-(4-Cl-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-Arg-cyclo[Cys-Glu-(1-Me-His)-(4-Cl-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-Tyr-Arg-cyclo[Cys-Glu-(1-Me-D-His)-(4-Cl-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-Tyr-Arg-cyclo[Cys-Glu-His-(4-Br-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-Tyr-Arg-cyclo[Cys-Glu-(1-Me-His)-(4-Br-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-Tyr-Arg-cyclo[Cys-Glu-(1-Me-D-His)-(4-Br-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>,

- Ac-Tyr-Arg-cyclo[Cys-Glu-His-(4-Me-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-His-(4-OMe-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-(1-Me-His)-(4-OMe-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-(1-Me-D-His)-(4-OMe-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-(3-Me-His)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-(5-Me-His)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-(5-Me-D-His)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-(1-benzyl-His)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-(1-benzyl-D-His)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-(1-Bom-His)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-(1-pyrazolyl-Ala)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-(4-phenyl-1H-imidazol-2-yl-Ala)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-(4-phenyl-1H-imidazol-2-yl-D-Ala)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-(2-pyrazine-Ala)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-(β-(1,2,4-triazol-3-yl))-Ala)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-(β-(1,2,4-triazol-3-yl))-D-Ala)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-(β-((1-benzyl)-1,2,4-triazol-3-yl))-Ala)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-(β-((1-benzyl)-1,2,4-triazol-3-yl))-D-Ala)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-(β-(2-furyl)-Ala)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-(\beta-(thien-2-yl)-Ala)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-(\beta-(1,3-thiazol-4-yl)-Ala)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-(β-(pyridin-4-yl)-Ala)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-glycinol,
- Ac-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-2-(2-aminoethoxy)ethanol,
- Ac-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-Ser alcohol,
- Ac-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH-(CH<sub>2</sub>)<sub>6</sub>-NH<sub>2</sub>,

Ac-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-Glu-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-Ser-Pro-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-Ser-Pro alcohol, Ac-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-Lys-Pro-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-Lys-Pro alcohol, Ac-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-Arg-Phe-NH<sub>2</sub>, Ac-Tyr-Cit-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Cit-cyclo[Cys-Glu-(1-Me-His)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-hArg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-(1-β-hArg)-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Lys-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Ser-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Val-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH2, N-succinyl-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-OH, cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-OH, cyclo[hCys-His-(4-F-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>, cyclo[hCys-His-(4-Cl-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-cyclo[hCys-His-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-OH, Ac-cyclo[hCys-His-(4-F-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-cyclo[hCys-His-(4-Cl-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>, N-cyclopropanecarbonyl-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, N-cyclobutanecarbonyl-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, N-cyclopentanecarbonyl-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, N-cyclohexanecarbonyl-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, N-hexanoyl-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, N-benzoyl-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, 4-phenylbutyryl-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, 3-guanidinopropionyl-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, 5-guanidinovaleryl-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

N-phenylsulfonyl-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

N-(2-naphthalenesulfonyl)-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

N-(4-phenylsulfonamido-4-oxo-butyryl)-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Arg-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

D-Arg-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Arg-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-OH,

Arg-cyclo[hCys-(1-Me-His)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Arg-cyclo[hCys-(1-Me-D-His)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-Arg-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-Arg-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-OH,

Ac-nLeu-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

phenylsulfonyl-Gly-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Tyr-Arg-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Tyr-Arg-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-OH,

Ac-Tyr-Arg-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-Tyr-Arg-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-OH,

Ac-Tyr-Arg-cyclo[hCys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-cyclo[hCys-His-(β-cyclohexyl-D-Ala)-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-cyclo[hCys-His-D-Phe-Arg-Trp-penicillamine]-NH<sub>2</sub>,

Ac-cyclo[hCys-His-(4-Cl-D-Phe)-Arg-Trp-penicillamine]-NH<sub>2</sub>,

N-hexanoyl-cyclo[hCys-His-D-Phe-Arg-Trp-penicillamine]-NH<sub>2</sub>,

N-cyclopentanecarbonyl-cyclo[hCys-His-D-Phe-Arg-Trp-penicillamine]-NH<sub>2</sub>,

N-cyclohexanecarbonyl-cyclo[hCys-His-D-Phe-Arg-Trp-penicillamine]-NH<sub>2</sub>,

N-benzoyl-cyclo[hCys-His-D-Phe-Arg-Trp-penicillamine]-NH<sub>2</sub>,

4-phenylbutyryl-cyclo[hCys-His-D-Phe-Arg-Trp-penicillamine]-NH<sub>2</sub>,

N-phenylsulfonyl-cyclo[hCys-His-D-Phe-Arg-Trp-penicillamine]-NH<sub>2</sub>,

(4-benzenesulfonamide)butyryl-cyclo[hCys-His-D-Phe-Arg-Trp-penicillamine]-NH<sub>2</sub>,

Ac-nLeu-cyclo[hCys-His-D-Phe-Arg-Trp-penicillamine]-NH<sub>2</sub>,

N-phenylsulfonyl-Gly-cyclo[hCys-His-D-Phe-Arg-Trp-penicillamine]-NH<sub>2</sub>,

cyclo[3-thiopropionyl-His-D-Phe-Arg-Trp-hCys]-NH<sub>2</sub>,

cyclo[Cys-His-D-Phe-Arg-Trp-hCys]-NH<sub>2</sub>, cyclo[Cys-His-(4-F-D-Phe)-Arg-Trp-hCys]-NH<sub>2</sub>, cyclo[Cys-His-(4-Cl-D-Phe)-Arg-Trp-hCys]-NH<sub>2</sub>, Ac-cyclo[Cys-His-D-Phe-Arg-Trp-hCys]-NH<sub>2</sub>, Ac-cyclo[Cys-His-(4-F-D-Phe)-Arg-Trp-hCys]-NH<sub>2</sub>, Ac-cyclo[Cys-His-(4-Cl-D-Phe)-Arg-Trp-hCys]-NH<sub>2</sub>, Arg-cyclo[Cys-His-D-Phe-Arg-Trp-hCys]-NH<sub>2</sub>, Arg-cyclo[Cys-His-(4-F-D-Phe)-Arg-Trp-hCys]-NH<sub>2</sub>, Arg-cyclo[Cys-His-(4-Cl-D-Phe)-Arg-Trp-hCys]-NH<sub>2</sub>, Ac-Arg-cyclo[Cys-His-D-Phe-Arg-Trp-hCys]-NH<sub>2</sub>, Ac-Arg-cyclo[Cys-His-(4-F-D-Phe)-Arg-Trp-hCys]-NH<sub>2</sub>, Ac-Arg-cyclo[Cys-His-(4-Cl-D-Phe)-Arg-Trp-hCys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-hCys]-NH<sub>2</sub>, Ac-cyclo[hCys-His-D-Phe-Arg-Trp-hCys]-NH<sub>2</sub>, Arg-cyclo[hCys-His-D-Phe-Arg-Trp-hCys]-NH<sub>2</sub>, Ac-Arg-cyclo[hCys-His-D-Phe-Arg-Trp-hCys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[hCys-His-D-Phe-Arg-Trp-hCys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[hCys-Glu-His-D-Phe-Arg-Trp-hCys]-NH<sub>2</sub>, and Ac-cyclo(S-CH<sub>2</sub>-S)[Cys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>.

2. A method for treating obesity in a patient, comprising administering by continuous infusion an effective amount of an MC4R agonist peptide to a patient in need thereof, wherein the MC4R agonist peptide is selected from the group consisting of:

Ac-Cya-Arg-cyclo[Cys-Ala-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
Ac-Tyr-Arg-cyclo[Cys-Ala-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
Ac-Tyr-Arg-cyclo[Cys-Arg-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
Ac-Tyr-Arg-cyclo[Cys-Asn-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
Ac-cyclo[Cys-Asp-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
Ac-Tyr-Arg-cyclo[Cys-Asp-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
Ac-cyclo[Cys-Gln-His-D-Phe-Arg-Trp-Cys]-OH,
Ac-Tyr-Arg-cyclo[Cys-Gln-His-D-Phe-Arg-Trp-Cys]-OHe,

Tyr-Arg-cyclo[Cys-Gly-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Gly-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-His-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Ile-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-cyclo[Cys-Leu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-cyclo[Cys-Lys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, N-methyl-Tyr-Arg-cyclo[Cys-Met-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Met-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Phe-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Pro-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Ser-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Thr-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Trp-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Tyr-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Val-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Arg-cyclo[Cys-Cya-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-D-Arg-cyclo[Cys-Cya-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Cya-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-cyclo[Cys-Glu-His-(4-F-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-cyclo[Cys-Glu-His-(4-Cl-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-cyclo[Cys-Glu-His-(4-Br-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-cyclo[Cys-Glu-(1-Me-His)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-Lys-Pro-NH<sub>2</sub>, Ac-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-Ser-Pro-NH<sub>2</sub>, N-propionyl-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, N-butyryl-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, N-valeryl-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, 3-guanidinopropionyl-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, 4-guanidinobutyryl-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, 5-guanidinovaleryl-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-diaminopropionyl-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-diaminobutyryl-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-OH,

D-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-D-Arg-cyclo[Cys-Glu-His-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-OH,

Ac-Arg-cyclo[Cys-Glu-His-(4-Cl-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-Arg-cyclo[Cys-Glu-(1-Me-His)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-D-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-D-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-OH,

Ac-hArg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-Cit-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-Cit-cyclo[Cys-Glu-(1-Me-His)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-Leu-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-Lys-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-Lys(ipr)-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-nLeu-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-nLeu-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-Ser-Pro-NH<sub>2</sub>,

Ac-Orn-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-Val-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

N-(2-naphthalenesulfonyl)-D-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

N-(2-naphthalenesulfonylamino-4-oxo-butyryl)-D-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

3-(4-hydroxyphenyl)propionyl-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

3-(4-methylbenzoyl)propionyl-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-OH,

Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH-(CH<sub>2</sub>)<sub>6</sub>-NH<sub>2</sub>,

Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-Glu-NH<sub>2</sub>,

Ac-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-OH,

N-succinyl-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, N-glutaryl-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, N-glutaryl-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-OH, gluconoyl-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys] alcohol, Ac-Tyr-D-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[D-Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Glu-(1-Me-His)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Glu-(1-Me-D-His)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Glu-His-(4-F-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Glu-(1-Me-His)-(4-F-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Glu-(1-Me-D-His)-(4-F-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Glu-His-(4-Cl-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Arg-cyclo[Cys-Glu-(1-Me-His)-(4-Cl-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Glu-(1-Me-D-His)-(4-Cl-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Glu-His-(4-Br-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Glu-(1-Me-His)-(4-Br-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Glu-(1-Me-D-His)-(4-Br-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Glu-His-(4-Me-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Glu-His-(4-OMe-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Glu-(1-Me-His)-(4-OMe-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Glu-(1-Me-D-His)-(4-OMe-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Glu-(3-Me-His)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Glu-(5-Me-His)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Glu-(5-Me-D-His)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Glu-(1-benzyl-His)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Glu-(1-benzyl-D-His)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Glu-(1-Bom-His)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Glu-(1-pyrazolyl-Ala)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-Tyr-Arg-cyclo[Cys-Glu-(4-phenyl-1H-imidazol-2-yl-Ala)-D-Phe-Arg-Trp-

Cys]-NH<sub>2</sub>,

- Ac-Tyr-Arg-cyclo[Cys-Glu-(4-phenyl-1H-imidazol-2-yl-D-Ala)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-(2-pyrazine-Ala)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-(β-(1,2,4-triazol-3-yl))-Ala)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-(β-(1,2,4-triazol-3-yl))-D-Ala)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-(β-((1-benzyl)-1,2,4-triazol-3-yl))-Ala)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-(β-((1-benzyl)-1,2,4-triazol-3-yl))-D-Ala)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-(β-(2-furyl)-Ala)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-(β-(thien-2-yl)-Ala)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-(\beta-(1,3-thiazol-4-yl)-Ala)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-(β-(pyridin-4-yl)-Ala)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-glycinol,
- Ac-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-2-(2-aminoethoxy)ethanol,
- Ac-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-Ser alcohol,
- Ac-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH-(CH<sub>2</sub>)<sub>6</sub>-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-Glu-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-Ser-Pro-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-Ser-Pro alcohol,
- Ac-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-Lys-Pro-NH<sub>2</sub>,
- Ac-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-Lys-Pro alcohol,
- Ac-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-Arg-Phe-NH<sub>2</sub>,
- Ac-Tyr-Cit-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Cit-cyclo[Cys-Glu-(1-Me-His)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-hArg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-(1-β-hArg)-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Lys-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Ser-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
- Ac-Tyr-Val-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

```
N-succinyl-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-OH,
cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-OH,
cyclo[hCys-His-(4-F-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>,
cyclo[hCys-His-(4-Cl-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>,
Ac-cyclo[hCys-His-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
Ac-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
Ac-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-OH,
Ac-cyclo[hCys-His-(4-F-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>,
Ac-cyclo[hCys-His-(4-Cl-D-Phe)-Arg-Trp-Cys]-NH<sub>2</sub>,
N-cyclopropanecarbonyl-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH2,
N-cyclobutanecarbonyl-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
N-cyclopentanecarbonyl-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
N-cyclohexanecarbonyl-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
N-hexanoyl-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
N-benzoyl-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
4-phenylbutyryl-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
3-guanidinopropionyl-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
5-guanidinovaleryl-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
N-phenylsulfonyl-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
N-(2-naphthalenesulfonyl)-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
N-(4-phenylsulfonamido-4-oxo-butyryl)-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-
        NH<sub>2</sub>,
Arg-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
D-Arg-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
Arg-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-OH,
Arg-cyclo[hCys-(1-Me-His)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
Arg-cyclo[hCys-(1-Me-D-His)-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
Ac-Arg-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
Ac-Arg-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-OH,
Ac-nLeu-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
phenylsulfonyl-Gly-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,
```

Tyr-Arg-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Tyr-Arg-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-OH,

Ac-Tyr-Arg-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-Tyr-Arg-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-OH,

Ac-Tyr-Arg-cyclo[hCys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-cyclo[hCys-His-(\beta-cyclohexyl-D-Ala)-Arg-Trp-Cys]-NH<sub>2</sub>,

Ac-cyclo[hCys-His-D-Phe-Arg-Trp-penicillamine]-NH<sub>2</sub>,

Ac-cyclo[hCys-His-(4-Cl-D-Phe)-Arg-Trp-penicillamine]-NH<sub>2</sub>,

N-hexanoyl-cyclo[hCys-His-D-Phe-Arg-Trp-penicillamine]-NH<sub>2</sub>,

N-cyclopentanecarbonyl-cyclo[hCys-His-D-Phe-Arg-Trp-penicillamine]-NH<sub>2</sub>,

N-cyclohexanecarbonyl-cyclo[hCys-His-D-Phe-Arg-Trp-penicillamine]-NH<sub>2</sub>,

N-benzoyl-cyclo[hCys-His-D-Phe-Arg-Trp-penicillamine]-NH<sub>2</sub>,

4-phenylbutyryl-cyclo[hCys-His-D-Phe-Arg-Trp-penicillamine]-NH<sub>2</sub>,

N-phenylsulfonyl-cyclo[hCys-His-D-Phe-Arg-Trp-penicillamine]-NH<sub>2</sub>,

 $(4-benzene sulfonamide) butyryl-cyclo [hCys-His-D-Phe-Arg-Trp-penicillamine]-NH_2,\\$ 

Ac-nLeu-cyclo[hCys-His-D-Phe-Arg-Trp-penicillamine]-NH<sub>2</sub>,

N-phenylsulfonyl-Gly-cyclo[hCys-His-D-Phe-Arg-Trp-penicillamine]-NH<sub>2</sub>,

cyclo[3-thiopropionyl-His-D-Phe-Arg-Trp-hCys]-NH<sub>2</sub>,

cyclo[Cys-His-D-Phe-Arg-Trp-hCys]-NH2,

cyclo[Cys-His-(4-F-D-Phe)-Arg-Trp-hCys]-NH<sub>2</sub>,

cyclo[Cys-His-(4-Cl-D-Phe)-Arg-Trp-hCys]-NH<sub>2</sub>,

Ac-cyclo[Cys-His-D-Phe-Arg-Trp-hCys]-NH<sub>2</sub>,

Ac-cyclo[Cys-His-(4-F-D-Phe)-Arg-Trp-hCys]-NH<sub>2</sub>,

Ac-cyclo[Cys-His-(4-Cl-D-Phe)-Arg-Trp-hCys]-NH<sub>2</sub>,

Arg-cyclo[Cys-His-D-Phe-Arg-Trp-hCys]-NH<sub>2</sub>,

Arg-cyclo[Cys-His-(4-F-D-Phe)-Arg-Trp-hCys]-NH<sub>2</sub>,

Arg-cyclo[Cys-His-(4-Cl-D-Phe)-Arg-Trp-hCys]-NH<sub>2</sub>,

Ac-Arg-cyclo[Cys-His-D-Phe-Arg-Trp-hCys]-NH<sub>2</sub>,

Ac-Arg-cyclo[Cys-His-(4-F-D-Phe)-Arg-Trp-hCys]-NH<sub>2</sub>,

Ac-Arg-cyclo[Cys-His-(4-Cl-D-Phe)-Arg-Trp-hCys]-NH<sub>2</sub>,

Ac-Tyr-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-hCys]-NH<sub>2</sub>,

Ac-cyclo[hCys-His-D-Phe-Arg-Trp-hCys]-NH<sub>2</sub>,
Arg-cyclo[hCys-His-D-Phe-Arg-Trp-hCys]-NH<sub>2</sub>,
Ac-Arg-cyclo[hCys-His-D-Phe-Arg-Trp-hCys]-NH<sub>2</sub>,
Ac-Tyr-Arg-cyclo[hCys-His-D-Phe-Arg-Trp-hCys]-NH<sub>2</sub>,
Ac-Tyr-Arg-cyclo[hCys-Glu-His-D-Phe-Arg-Trp-hCys]-NH<sub>2</sub>, and
Ac-cyclo(S-CH<sub>2</sub>-S)[Cys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>.

- 3. The method of Claim 1, wherein the MC4R agonist peptide is administered using a pump.
- 4. The method of Claim 1, wherein the MC4R agonist peptide is administered using a depot.
- 8. The method of Claim 1, wherein the MC4R agonist peptide is cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Arg-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-OH, Ac-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, or Ac-D-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>.
- 9. The method of Claim 1, wherein the MC4R agonist peptide is Ac-D-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>.
- 18. The method of Claim 2, wherein the MC4R agonist peptide is administered using a pump.
- 19. The method of Claim 2, wherein the MC4R agonist peptide is administered using a depot.
- 20. The method of Claim 2, wherein the MC4R agonist peptide is cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Ac-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, Arg-cyclo[hCys-His-D-Phe-Arg-Trp-Cys]-OH,

Ac-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>, or Ac-D-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>.

21. The method of Claim 2, wherein the MC4R agonist peptide is Ac-D-Arg-cyclo[Cys-Glu-His-D-Phe-Arg-Trp-Cys]-NH<sub>2</sub>.